ALLENSTOWN & PEMBROKE

TRI TOWN

Emergency Medical Service

Paramedic Ambulance Service

2017 Director's Report

PREFACE

Tri-Town Emergency Medical Service was created in June of 2012 and began operation in January of 2013. Prior to that date the Tri-Town Volunteer Emergency Ambulance Service was a non-profit entity that once provided ambulance service to the Towns of Allenstown, Hooksett and Pembroke. The Town of Hooksett now provides ambulance services through its fire department.

Under New Hampshire RSA 53-A, the Towns of Allenstown and Pembroke entered into an inter-municipal agreement to create a public entity to provide ambulance service for both communities. A Board of Directors is the governing body for the Service in accordance with this agreement. The ambulance is housed at the Pembroke Safety Center. The Service is staffed 24 hours per day, 7 days per week at the *Paramedic* Level. The cost of the Service is partially subsidized by funding provided from each town on a percentage basis in accordance with the provisions of the agreement. The Service also bills patients through a third party billing firm making up the remainder of the revenues that pay for the cost of operations.

Tri-Town EMS utilizes Concord Hospital as its Medical Resource Hospital and provides Emergency Medical Care under the coordination and guidance of Dr. David Hirsch. As part of the Medical Resource Hospital Agreement (MRH), Tri-Town EMS receives many of the medications and supplies the Service needs from Concord Hospital.

This report was created on MONTH DAY YEAR, by the Service Director, Christopher Gamache BS, NRP. This document contains data that was obtained from the New Hampshire Department of Safety, Bureau of Emergency Medical Service patient care reporting website, www.NHTEMSIS.org/elite, where all patient records for the Service are maintained. Tri-Town EMS is dispatched by Concord Fire Alarm who maintains all the times associated with the Service's EMS Incidents. Financial data has been provided by the Town of Pembroke and by ComStar Ambulance Billing.

SUMMARY

Tri-Town Emergency Medical Service had its busiest year since starting operations on January 1, 2013. The primary service area encompasses the towns of Allenstown and Pembroke, adding the calls for EMS services to other communities, the Service had total call volume of 1,302 calls, of which 1,203 were handled by Tri-Town EMS. This represents a 224 increase over the call volume from 2016. In 2017, the Service hit a milestone of surpassing 5,000 EMS incidents in our history.

In 2017, Tri-Town EMS implemented numerous programs with the intent to provide better services to the towns of Allenstown and Pembroke, promote public safety and awareness and expand our capabilities. We continued to provide Cardio-Pulmonary Resuscitation (CPR) courses to include Hands-Only CPR instruction, started the Vial of Life Program for our service area, sent patient satisfaction surveys to all our patients, continued our continuing education program for EMS licensure, and hosted an Emergency Medical Responder (EMR) course. Additionally, we feel very strongly that our service area is part of a larger EMS system and we have much to offer at regional and state level committees to promote advances in Emergency Medical Services and to the overall Public Health.

Lastly, we are proud of our accomplishments in 2017. Tri-Town Emergency Medical Service, with the Allenstown Fire Department and Allenstown Police Department, was named the New Hampshire EMS Unit of the Year. The award was given to the agencies on September 25th, 2017. This award was granted on the basis of a few notable EMS runs. One being, one (1) of the three (3) Cardiac-Arrest Saves the Service was involved in during the year. The award, as well as the saves, really illustrate the productive working relationship the Service enjoys with our Fire and Police partners in both communities. Ultimately the true beneficiary is the public, as we, with the Fire and Police departments, give the residents the best chance of survival when a critical injury or illness occurs. In addition to the cardiac arrest saves, the Service successfully delivered over ten (10) patients suffering a life threatening Heart Attack or *Myocardial Infarction* (MI), alive, to the receiving hospital. With early detection, aggressive treatment and appropriate notification, these patients were emergently brought to the Cardiac Catheterization Laboratory or *Cath. Lab.,* and they were able to survive their ordeal. Allenstown and Pembroke have their fair share, of residents with an *Opiate Addiction* Problem. As a result of our deployment model, our *Paramedics*, *Advanced EMT's* and *EMT's*, respond quickly to the emergency and in many cases, arrive in time to reverse the effects of the opiate, saving that person's life. It needs to be noted, that this is not always the case. Time is critical to these people and in most of the deaths that were encountered, a delay in EMS activation had a direct impact on the poor outcome of the call. As the Director, I cannot stress enough, when an overdose has occurred, 911 must be called and EMS activated quickly.

BILLING & REVENUES

Tri-Town EMS contracts with ComStar Ambulance Billing Service to appropriately bill the appropriate payer for EMS transports performed by the Service. We are contracted to pay ComStar 5% of the amount received through their efforts. It should be noted that Tri-Town EMS directly bills for Paramedic Intercepts and Detail Coverage.

In November of 2016, I created a report outline the EMS billing details and processes of the Service, to help clarify the complexity of EMS billing. Representatives from ComStar were invited to attend the January 2017 Board of Director's Meeting, so the Board members could ask questions and obtain a better understanding of EMS billing. ComStar representatives made some recommendations to the Service about billing and some of these were added to the rate changes and billing practice changes that I recommended in December 2017 and January 2018.

The Service recommended a rate change for 2018. The recommendation was based upon numerous factors. We were around the 50% for New Hampshire services. Our rates were in-line with ambulance services that did not provide constant paramedic coverage nor provided 24 hour ambulance staffing. Considering our revenues are significantly below our operating costs, it was my recommendation to increase the rates. The recommendation increased the rates such that the Service would now be in the 75% for New Hampshire services, meaning our rates were now consistent with like services. The recommended rates area as follows:

- Basic Life Support (BLS) $800.00 (+$50.00)
- Advanced Life Support 1 (ALS1) $1,250.00 (+$250.00)
- Advanced Life Support 2 (ALS2) $1,750.00 (+$500.00)

Patients who are not affected by the new rates are Medicare and Medicaid Patients. These patients have a governmental payer and by law, EMS reimbursement is capped. This patient population represents about 63% of our transports.

The recommendation to raise the rates was intended to first ease some of the burden off the tax payers of Allenstown and Pembroke. The second reason was to make changes to our billing practices to ease the burden of the patients who reside in the primary service area, if they do not have health insurance or for patients who only have Medicare to not refer them to collections for the 20% they are responsible for if they cannot pay the balance. The current recommendation is that residents of Allenstown who do not have any health insurance will have their balance automatically reduced to Medicare Allowable, to include mileage, for that call, for that year. Essentially, self-pay patients, who reside in Allenstown or Pembroke, will only be charge the current Medicare rate for the call. These patient will still face the possibility of collections if they fail to make payments, and do not seek a hardship case. Medicare only patients, who reside in Allenstown and Pembroke will not have to seek a hardship case for the 20% they are responsible for if they fail to pay the balance. They will go through the normal billing cycle and when their account goes into default, the balance will be written-off. Per ComStar, these billing practices

are common, specifically in Massachusetts, and do not violate any rule or regulation for medical billing, as since Tri-Town EMS is a municipality, and is supported by taxes, the rational is that the patient will either directly pay for the ambulance transport through traditional billing, OR will indirectly pay for the service through taxes.

Billing data for 2017 is incomplete and will be so for at least 6 months. When looking at the period of June 1st, 2016 to May 31st 2017, there were a total of 728 transports that resulted in $392,391.26 received by the Service. This gives an average revenue per transport of $539.00. 2017 saw 824 patients transported. This shows a significant increase in transports from the first 12-month period mentioned to the second. As transports increase so does revenue. As long as the payer spread remains relatively constant, the revenue per transport should as well. This would suggest a final revenue from EMS transports for 2017 to be $444,136.00. 2016 had 725 transports which resulted in revenues equaling $361,590.87 and a revenue per transport of $498.75. The trend of the Service is we are doing more transports, with a consistent increase seen each year of operations which suggests 2018 will have more transports than 2017.

GROSS CHARGES	ALLOWANCES	NET CHARGES	REVENUE	BALANCE
$945,466,40	*$413,119.21*	*$532,347.19*	*$394,495.67*	*$137,851.52*

Tri-Town EMS provided EMS Coverage for State9 Racing, The Deerfield Fair Association, Pembroke Friends of Football and the Amoskeag Rowing Club. This created $1,505.00 in revenue. We also provided other communities with Paramedic Intercept Services four (4) times for a total of $2,180.00. Other sources of income included, CPR courses, Emergency Medical Responder Course, and fees collected for Patient Care Report distributions.

STAFFING & SCHEDULING

During 2017, Tri-Town EMS continuously provided at least one (1), full staffed Paramedic Level Ambulance throughout the year. Earlier in the year, this was a challenge as the Service saw two (2) of its full time employees vacate their positions at the same time. As a result of these vacancies, Tri-Town EMS was able to hire experienced paramedics, strengthening the overall clinical capabilities of the Service. With this change, we made the schedule change to be more palatable to our full time staff, so that they now work a *rotation* of Twenty-Four (24) hours on and *Seventy-Two (72)* hours off. This rotating schedule is utilized regularly by Fire and EMS services in the state and around the country. The New Hampshire Department of Labor and the New Hampshire Retirement System was consulted, and both organizations stated the new schedule does not violate any of their rules. This rotation has created challenges for the Director and Assistant Director as both position are regularly assigned ambulance shifts, with meetings and other appointments occurring on the other days.

The Service saw a few employees vacate their positions early in the year. The non-full time employees were relatively inactive and had no impact on the schedule. The full time vacancies were already discussed. We were able to hire employees, full time and per diem who are active to replace those we lost. It wasn't until late fall, early winter until we received two (2) more resignations (additional 2 in January 2018). Three of these resignations were again, from staff who were inactive and felt it was time to resign their positions. Subsequently, four (4) per diem employees were hired.

I feel our current staffing is adequate. Our staffing level allows for all per diem and part time employees to work regular hours. This ensures a good working relationships with the other employees, knowledge of the Service procedures, equipment and service area. We are able to regularly fill most of our per diem and open paramedic shifts, with minimal use of overtime. To ensure our employees work regular hours, the roster is kept between 24-28 employees. The two draw backs to this staffing plan are:

1. It has a noticeable effect on the schedule when active employees leave.
2. Overtime becomes unavoidable when full time and to some degree, part time employees take time off.

However, I feel this is a reasonable trade-off as we have an active work force and the advantages of this is seen on calls, where are staff functions smoothly and confidently, thus benefiting our patients.

As part of our staffing plan, the Service's employees are paid to attend Service trainings and the quarterly EMS Grand Rounds put on by Concord Hospital and the New Hampshire Fire Standards and Training. We sometimes have to use overtime to pay our employees to be instructors at our National Continued Competency Program (NCCP) trainings. This cost is less than if the Service were to contract with an outside vendor to put on our education, and/or to send our staff to seminars, trainings and refreshers. It should be noted that when an employee is an instructor at a training, they would normally have attended the training, so the overtime is limited to an extra hour or two.

AMBULANCE 8

In February of 2017, the Service took delivery of Ambulance 8. The ambulance was ordered in June of 2016 from Sugarloaf Ambulance/Rescue Vehicles, the regional sales representative for PL Custom. Ambulance 8 is a Type I, ambulance, on a Ford F-550 Chassis, with four wheel drive. The chassis was selected specifically for the four wheel drive option, as our service area has many hills which presents a problem with our other and past ambulances. Also, the Type I ambulance (or pick-up chassis style ambulance), allows for more room in the patient compartment. Numerous electrical outlets were added (both 120VAC and 12VDC). This should eliminate the use of a power strip and running cords across work areas and the floor. The number "8" was

selected as there are virtually an equal number of “Ambulance 1” and “Ambulance 2” as communities in the Capital Area. At the time Tri-Town EMS ran the only “Ambulance 3”. Concord runs Ambulance 4, Ambulance 5 and Ambulance 7. To have our ambulance with a unique call sign, Ambulance 8 was selected. This was important was if our ambulance crew is in trouble, “Ambulance 8” is very distinctive and will help ensure Concord Fire Alarm knows the ambulance crew that is calling. A secondary benefit to the ambulance number, is for any large scale events the ambulance will be part of. Having the same ambulance number as other communities will make it difficult for the staging officers and other incident managers to keep track of which ambulance 1 (or 2) is doing what. Renumbering the primary ambulance was considered a priority.

The color scheme was selected primarily to ensure the ambulance is highly visible. Following the lead of European ambulance services, yellow has become one of the colors associated with EMS and is one of the recommended colors for an ambulance for visibility purposes. The grey top and black horizontal and vertical striping, contrast the yellow and adds differing patterns to make the ambulance more visible.

The ambulance has an all LED package with a random flash pattern of its emergency lighting. In addition to the traditional red lights, blue, amber and white lights were added to make the ambulance more visible in a variety of lighting conditions (day, night, snow, rain, etc.) Forward angled scenes lights, which are becoming popular in the capital area were included, so that the ambulance crew can light up the houses they are approaching to see the house number. This allows for 360° lighting.

The patient compartment was specified with the “Medic-In-Mind” concept. This concept places compartments and other equipment storage in the area of the traditional bench seat, such that the EMS provider can perform virtually all essential tasks while remaining seated, thus limiting the number of time they have to get up in a moving vehicle. To compliment this, the hospital radio was installed in this area and this radio is separate from the radio in the cab. This eliminates the need for the driver to change the radio channel while driving. On a side note, a vehicle repeater was added to the ambulance to improve radio communications when the ambulance crews are using their portable radios. The storage compartments were specified to meet the Commission on Accreditation of Ambulance Services (CAAS) standards for the security of Advanced Life Support supplies, such as needles, medications, IV fluids, etc. A Knox Medication Vault was installed to ensure the security of our controlled substances. Each paramedic has a unique PIN to be used to unlock the vault. Every attempt to unlock the medication vault is electronically logged and reports are run to ensure compliance with the Services policy on medication checks and security. There are four (4) cameras on the ambulance. One (1) facing forward, one (1) on the passenger side (activated when the right directional is activated), one (1) in the rear of the ambulance to assist in backing and one (1) in the patient compartment, so that the driver can monitor the patient compartment. An intercom system has been installed and this allows for the driver to hear what is going on in the patient compartment and allows for the

driver to communicate with the patient compartment by using a push-to-talk button on the system. Privacy windows are in place to keep on-looker and other driving by the ambulance from looking in.

A Stryker Load System was installed. This with our new Stryker XPS stretcher, decreases the amount of lifting our staff has to do to get a patient into the ambulance. Once a patient is now on the stretcher, the crew is not required to do anymore lifting of the patient. This system seconds as a positive attachment of the stretcher to the ambulance, thus the stretcher will remain in place in the event the ambulance is in a collision and rolls over.

SURVEYS and PRIVACY PRACTICE NOTICE

During 2016, the Service was working on creating the Privacy Practice Notice or HIPAA Notice. The Service was noncompliant with the federal mandate of providing patients with our privacy practices. During this time, a patient satisfaction survey was being developed. I had decided to merge the two items together and mail them to our patients in an attempt to ensure they receive it. Past experience has shown that when EMS provides the notice at the time of the service, the notice is simply left on the hospital bed and discarded. This method has the patient receiving the notice under a more normal circumstance with the hope that they will read the survey, fill it out and sent it back to us. Tri-Town EMS opened a Business Reply Mail Account through the USPS for this reason.

With around 1,000 Privacy/Surveys mailed, we received back 182 surveys for 2017. This is an almost 20% response rate which we consider excellent. The surveys ask the patient or responsible party about, Response Time, Crew Appearance, Professionalism, Medical Knowledge, their Treatment, How well the crew Worked Together, the crew's Compassion, the ambulance's Appearance and Cleanliness, how well the crew Attended to the patient's needs, if they were kept Informed, and if they support a 24/7 Paramedic Service. The Service has a rating of 97% or higher in all categories and a rating of 100% for Attentiveness and Support for the Service. We find these surveys helpful in the sense that we send all our patient's a survey, so if they have any criticisms, we are basically giving them the ability to voice them. With a very few exceptions, the surveys have all come back very positive.

VIAL of LIFE PROGRAM

Also during 2016, we started working on the Vial of Life program. This is a packet we have been placing in the Town Offices, Fire Stations and in the Ambulance. These packets provide a place where patients can write down pertinent medical information to help cut down on delays in medical treatment. Last year about 200 Vial of Life Packets were handed out. These packets can be requested at the time of service as they are in the ambulance, picked up at the mentioned

locations, or people can call the station at 485-4411 and request one. There is no cost to the public for these.

CARDIAL-PULMONARY RESUSCITATION (CPR)

Tri-Town EMS has three (3) American Heart Association (AHA ™) instructors. During the course of the year, we have put on numerous CPR courses, most of which are CPR for Healthcare providers. This is a free service to the residents of Allenstown and Pembroke and to employees of both towns. It is important that as many people as possible learn CPR, as early recognition of Cardiac Arrest and early CPR, give a person the best chance of survival.

In addition to the traditional CPR that is being taught, the AHA is pushing that the public learns "Hands Only CPR". From studies, it has been determined that uninterrupted chest compressions is the single most important treatment that needs to occur when someone is in Cardiac Arrest. Tri-Town EMS staff demonstrated this life saving technique last year to numerous groups, the largest being at Old Home Day.

In 2017, the Service recommended a policy for requiring all employees of Tri-Town EMS have a current AHA – CPR certification. Much of our EMS protocols that deal with the management of Cardiac Arrest is based on the AHA guidelines and we feel the training through the AHA is better than other CPR certifying organizations.

As mentioned earlier in this report, 2017 saw three people who were in Cardiac Arrest, survive the event, in part due to the quality CPR they received early on. Quality CPR coupled with prompt and appropriate treatment by our Paramedics, allowed them to survive to be discharged, Neurologically Intact.

TYPE OF CPR CLASS	# TRAINED
Hands Only CPR	119
Healthcare Provider CPR	28
Total Number of People Trained in CPR	147

EMS EDUCATION

Tri-Town EMS, for the second year, provided our staff, members of both fire departments and other EMS providers in the state with EMS education that is compliant with the National Registry of Emergency Medical Technician NCCP criteria. The training provided is part of a 2 years series of trainings that started in April of 2016 and will end in March of 2018. These trainings are developed to meet most, if not all of an EMS providers educational needs to relicense, regardless of their license level. Turnout for these trainings is relatively good and we are pleased to see other agencies represented. These trainings are free to anyone who wants to attend. Assistant

Director Stephanie Locke has done a great job ensuring a variety of speakers from Tri-Town EMS and outside our organization. The next training cycle starts April 10th 2018.

We hosted an Emergency Medical Responder course that started in September of 2017. The course had 16 participants who finished. Tri-Town EMS did not charge members of the Pembroke and Allenstown Fire Department who attended. With those who paid to attend, we essentially covered our costs of the course with the revenue that was generated. This was the first licensing course the Service put on and it provided necessary experience to help us improve future courses. We are currently planning on hosting an Advanced Emergency Medical Technician course starting in March of 2018.

CAPITAL AREA PUBLIC HEALTH NETWORK (CAPHN) & SUBSTANCE ABUSE DISORDER (SuD)/ CONTINUUM OF CARE (CoC) GROUP

I have been active in attending the monthly meetings of the Capital Area Public Health Network. This group is made up of Public Health Officers and other people who have a stake in public health issues. Tri-Town EMS was initially introduced to this group from the work we were doing locally with the distribution of Naloxone. My part in this group is primarily as a representative from the EMS community and with the secondary function of representing the two towns.

Among emerging public health concerns, the distribution of essential medical supplies and/or vaccinations is a major part of CAPHN and I took part in a discussion of the regional plan for distribution that was held in Bow. The group also looks at emergency sheltering and is developing forms and plans to enact to help make setting up a shelter and operating it, easier. Staff of Tri-Town EMS may be called upon if or when either of these situations are enacted.

Because of my involvement in CAPHN, I was referred to a group that was reforming, to look at ways to address the opioid issue in the capital region. I joined this group with the goals of helping to develop alternative patient destinations for addicts who need transport to some sort of treatment facility. Right now, we transport to the Emergency Department at a Hospital. In most cases, it is the general feeling that this is not the most ideal place to bring a person. I also have the goal of developing algorithms to help EMS provide determine the level of urgency of a person as it pertains to addiction and/or psychiatric problems and based upon that assessment, to provide guidance to a suitable locations to bring the person. Understanding that in some cases that will mean leaving the person at their residence and arranging or assisting in the arrangement of resources to help the person. This group consists of many different professions involved in the prevention, treatment and recovery of people who suffer from addiction.

NEW HAMPSHIRE EMS MEDICAL CONTROL BOARD & PATIENT CARE PROTOCOL COMMITTEE

Tri-Town EMS tries to ensure we have representation at all Bi-Monthly Medical Control Board Meetings. Future changes to our patient care protocols, updates from the New Hampshire Bureau of EMS, and other topics applicable to EMS are discussed by Medical Control Physicians from around the state and other EMS providers. These meetings are more informational, however, we, as EMS providers and administrators, have to ability to express our concerns to proposed changes how EMS functions.

Through Assistant Director Stephanie Locke, and now Andrew Merelman, we have representation on Protocol Committee. This is the group of EMS providers and other medical professionals who look at our patient care protocols, research them and suggest recommendations based upon Evidence Based Practices.

ACTIVE SHOOTER PREPAREDNESS

The New Hampshire Department of Homeland Security offered an EMS grant for the purchase of protective gear and specific supplies for medical treatment that would be used in the event of an Active Shooter Incident. The Town of Allenstown was planning an Active Shooter Drill to test all the local resources and operational guidelines for such an incident.

Tri-Town EMS, along with the Allenstown Fire Department requested Concord Fire Department's SOG for an Active Shooter Response and obtained a copy of the New Hampshire EMS suggested SOG for an Active Shooter Event and developed our response plan from the two documents. Allenstown and Tri-Town's plan are virtually the same, with some minor differences that are associated with the specific agency.

Tri-Town EMS and Allenstown Fire Department both applied for and were awarded the grant. Both agencies purchased the equipment. With the assistance of Dr. David Hirsch, Concord Fire Department Battalion Chief Sean Brown and Concord Police Department Lt. Michael Pearl, the Service hosted a training at the Allenstown Fire Department, providing an overview of tactics, injuries and treatments employed during an Active Shooter Event. The training ended with a review of the equipment and a few trial runs of EMS and PD making an entry into a "Warm Zone". After the training, a table top exercise was conducted to walk through the tactics that are intended to be used during the drill.

On August 9th, 2017, Tri-Town EMS, Allenstown Fire Department, Allenstown Police Department, NH Department of Homeland Security, New Hampshire Fire Standards & Training, Concord Fire Department, Regional S.W.A.T unit, Allenstown School Department and Concord Hospital all participated in the Active Shooter Drill located at Allenstown Elementary School. The drill went well and identified some critical items that needed to be addressed.

The Service received the $6,000.00 in grant funds in December. All initial training has been completed. The remaining requirement is an on-line EMS-In-The-Warm Zone operational training. This training has not been releases as of the time of this report. The Service intends to have at least one table top exercise a year and one walk through a year on Active Shooter Event Tactics. The Service intends to work with the Pembroke Police Department and Pembroke Fire Department to adopt a similar plan, ensuring both communities have an effective and seamless response plan to this type of event.

CORRESPONDANCE WITH OTHER HEALTHCARE & PUBLIC SAFETY AGENCIES

During 2017, Tri-Town EMS was in contact with the following Healthcare and Public Safety Agencies to better serve individuals and our community.

1. Allenstown Fire Department
2. Allenstown Police Department
3. American Medical Response
4. Auburn Fire Department
5. Capital Area Mutual Aid Compact
6. Capital Area Public Health Network (CAPHN)
7. Catholic Medical Center
8. Concord Fire Department
9. Concord Hospital
10. Elliot Hospital
11. Epsom Fire Department
12. Granite State Independent Living
13. Hooksett Fire Department
14. Manchester – Boston Regional Airport
15. New Hampshire Bureau of Elderly and Adult Services
16. New Hampshire Bureau of Emergency Medical Services
17. New Hampshire Department of Homeland Security and Emergency Management.
18. Pembroke Academy
19. Pembroke Fire Department
20. Pembroke Police Department
21. Substance Abuse Disorder (SuD) / Continuum of Care (CoC) Workgroup
22. Town of Pembroke

EQUIPMENT PURCHASED

During 2017, the Service purchased the following equipment:

1. Stryker XPS Power Stretcher
2. Stryker PRO Stair Chair
3. Carbon Monoxide Meters
4. Ferno Scoop Stretchers
5. Motorola Portable Radios
6. Ballistic Helmets, Ballistic Vests and Gear Bags (EMS in the Warm Zone Grant)
7. Mermaid Refrigerator (Ambulance 8)
8. Physio-Control spO_2 and spO_2/CO probes (LP 15)
9. McGrath Video Laryngoscope (and Blades)

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FINANCES

LINE NAME	BUDGETED	ACTUAL
Ambulance Revenue	$313,000.00	$395,794.67
Allenstown Payment	$190,739.00	$190,739.00
Pembroke Payment	$226,632.00	$226,632.00
Miscellaneous Revenue	$13,850.00	$14,185.00
Interest	$1.00	$13.98
TOTAL REVENUE	**$744,222.00**	**$827,364.65**
Full Time Salaries	$223,093.00	$214,600.61
Per Diem Salaries	$232,277.00	$182,243.03
Overtime	$10,000.00	$39,547.16
Health Insurance	$46,000.00	$39,647.69
Dental Insurance	$7,155.00	$5,296.93
Life Insurance	$300.00	$125.04
Disability Insurance	$2,800.00	$2,583.77
Social Security	$28,853.00	$27,056.23
Medicare	$6,748.00	$6,720.42
NH Retirement	$27,256.00	$28,485.42
Uniforms	$5,000.00	$4,344.03
Training & Certification	$6,318.00	$7,185.55
Legal Services	$15,000.00	$978.00
Telephone	$6,000.00	$5,612.00
Contracted Billing Services	$15,750.00	$18,609.0
Accounting Services	$5,800.00	$5,800.00
Building Maintenance	$4,200.00	$2,906.85
Ambulance & Life Pack Lease	$189,492.00	$192,826.84
Liability Insurance	$7,000.00	$7,357.25
Unemployment Compensation	$500.00	$403.00
Worker's Compensation	$11,500.00	$12,626.97
Department Supplies	$13,932.00	$26,413.54
Postage	$1,000.00	$727.99
Fuel	$7,000.00	$5,533.92
Office Supplies	$4,550.00	$5,644.93
Medical Equipment (Maint.Repl)	$4,998.00	$15,651.10
Radio/Communications Equipment	$5,450.00	$4,545.75
Vehicle Maintenance & Repair	$5,000.00	$5,303.63
Computer/Software	$3,250.00	$1,847.49
Medical Evaluation	$7,500.00	$2,476.50
Equipment & Vehicle Replacement	$30,000.00	$30,000.00
TOTAL EXPENDITURES	**933,722.00**	**$903,101.17**
REVENUE (-) EXPENDITURES	***($189,500.00)***	***($75,736.52)***
TRANSFER from FUND BALANCE	**$189,500.00**	**$75,736.52**

NOTE All Numbers Are Estimations and are Subject to Changes Based Upon Audit Adjustments and Results.

ANNUAL TRAINING REPORT

Tri-Town EMS provides monthly trainings for our staff and anyone else who wishes to attend. The Service training is coordinated such that the National Registry of Emergency Medical Technicians (NREMT) National Continued Competency Program (NCCP) requirements are met for all license levels. Tri-Town EMS, through Assistant Director Stephanie Locke, NRP, I/C, created the training plan for the Service and the current cycle started in April of 2016 and will conclude in March 2018.

MONTH	TOPIC	INSTRUCTOR	CATEGORY	HOURS AWARDED
January	Cardiac Arrest and LVAD	Dr. Hirsch & Aaron McIntire	National	2/0.5
February	ROSC	Hearshell VanLuven	National	2
March	CANCELLED			
April	Special Healthcare Needs	Stephanie Locke	National	2
May	Oxygenation, Capnography, Adv Airway in Perfusing Patients	Hearshell VanLuven	National	3
June	Cardiac Arrest	Dr. Hirsch (EMS Grand Rounds)	National	2.5
July	Active Shooter / EMS in the Warm Zone	Dr. Hirsch, Batt Chief Brown (CFD), Lt. Pearle (CPD)	Individual	4.25
August	No Trainings			
September	Culture of Safety, Communicable Diseases, OB Emergencies, Pediatric Transport	Christopher Gamache & Stephanie Locke	National	0.5/1/1/0.5
October	Medication Delivery, Pain Management, At Risk Population	William, Amos	National	1/1/1
November	Role of Research, Annual Skills Night	Stephanie Locke	National /Local	1/2
			Total NCCP Hours	25.25

Tri-Town EMS utilizes EMS publications as a means of providing regular, on shift trainings that cover a variety of EMS topics. We have a subscription of Journal of Emergency Medical Services (JEMS) and EMS World. Some of the hours for these trainings can be used by our staff for relicensing.

MONTH	JEMS ARTICLE	HOURS AWARDED
January	Shocking double (Double Sequential Defibrillation)	0.25
February	Special Needs in the Field: A guide to Helping Patients with Disabilities	0.5
March	From the OR to the Streets: A comprehensive review of the most versatile items in your drug box	0.5
April	Just a cough? Examining when airway discomfort indicates something serious	0.25
May	Damage Control Resuscitation	0.5
June	Dead Heat: treating exertional heat stroke is a race against time & temperature	0.5
July	Progressive Dyspnea	0.25
August	A unique approach: Active Shooter Planning & Response in Healthcare.	0.25
September	Back for despair - PSTD	0.25
October	Drug Diversion	0.25
November	Toxic Terrorism	0.25
December	Stop! In the name of blood: pharmacology to the tune of anticoagulant reversal	0.25
	TOTAL HOURS	4

MONTH	EMS WORLD ARTICLE	HOURS AWARDED
January	A guide to autonomic pharmacology	0.5
February	Anti-dysrhythmics in cardiac arrest: what does the literature say?	0.5
March	The lost art of conversation	0.25
April	Are you considering crush injury in narcotic overdoses	0.25
May	Patient handoffs	0.25
June	Excited delirium	0.25
July	On the frontlines: EMS and the battle for Mosul	0.25
August	NY Personnel say EMTs need better training on handling aggressive patients	0.25
September	BiPAP essentials for EMS providers	0.25
October	Old remedies for difficult new conditions	0.25
November	Finding ELVO: New stroke scales for EMS	0.25
December	Autism awareness for first responders	0.25
	TOTAL HOURS	3.5

Summary of Continuing Education for Tri-Town EMS Staff

Instructor hours by Christopher Gamache, BS, NRP	19.5
Instructor hours by Stephanie Locke, NRP, I/C	94.5
Instructor hours by William Amos	12
Instructor hours by Hearshell VanLuven	5
Total Instructor Hours	**131**
Documented continuing education received by all employees	453
Paramedic Refresher Hours (Gamache/Locke)	80
EMS Grand Rounds (Concord Hospital & NHFS&T)	22.5
Total Documented Continuing Education Hours for 2017	**555.5**

QUALITY ASSURANCE / QUALITY IMPROVEMENT ANNUAL REPORT

Tri-Town EMS reviews 100% of runs to ensure compliances with New Hampshire Patient Care Protocols, Service standards and billing rules. The most common issue encounter through this process was not clinical but rather with billing. Staff are continuously reminded to obtain all the patient demographics to ensure accurate billing. Additionally, the staff was reminded to attach all ECG tracings with the Patient Care Report (PCR). This was made easier when we were able to synch. the data from the Life Pak 15 to NH TEMSIS.

During 2017, the Service had three (3) cardiac arrest saves, two were medical and one (1) was traumatic. Feedback from Concord Hospital and Elliot Hospital was received by the Service for STEMI (heart attack) runs, a pediatric cardiac arrest and trauma patients. In these cases, the feedback was positive and the Service was complimented on the care that was provided.

Dr. David Hirsch stepped down from being the Medical Director for Concord Hospital and was replaced by Dr. Nicholas Larochelle in November.

ADMINISTRATION

- Allenstown Town Administrator …… Shaun Mulholland
- Pembroke Town Administrator …… David Jodoin
- Allenstown Fire Chief …… Chief Shawn Murray
- Pembroke Fire Chief …… Chief Harold Paulsen
- Allenstown Public Representative …… Michael O'Mara
- Pembroke Public Representative …… Robert "Bob" Bourque
- Tri-Town EMS Employee Representative …… Hearshell VanLuven, NRP, FTO
- Tri-Town EMS Director …… Christopher Gamache, BS, NRP
- Tri-Town EMS Assistant Director …… Stephanie Locke, NRP, I/C

A FINAL THANK YOU & GOOD-BYE

As the Director of Tri-Town EMS, I want to say *Good-Bye* and *Thank You* to Chief Dana Pendergast, Shaun Mulholland and Dr. David Hirsch. Each of these individuals did a lot to help Tri-Town EMS progress forward and helped me acclimate to my role as Director when I was hire in 2014. I wish them all the best in their future endeavors.

EMS INCIDENT DATA

TOTAL Number of INCIDENTS ……1,302 (2016 – 1,082)

- Allenstown……..509 (42.2%/ 39.1%)(2016 - 469)
- Pembroke …… 699 (57.8%/53.7%)(2016 – 524)
- Barnstead …… 1 (2016 – 3)
- Bow …….. 1 (2016 – 2)
- Chichester …… 1 (2016 – 0)
- Concord …… 31 (2016 – 8)
- Deerfield …… 4 (2016 – 3)
- Epsom …… 18 (2016 – 12)
- Hooksett …… 38 (2016 – 60)

INCIDENTS Handled by Tri-Town EMS …… 1,203 (2016 – 1,009)(92.4%)

Mutual Aid RECEIVED from other Departments …… 99 (2016 – 73)(7.6%)

- Bow Fire Department …….. 1 (2016 - 0)
- Concord Fire Department …… 61 (2016 – 49)
- Epsom Fire Department …… 25 (2016 – 14)
- Hooksett Fire Department …….. 15 (2016 – 10)

(Department numbers won't add up to number of incidents as mutual aid is brought in for 2nd and 3rd ambulances and does)

Mutual Aid GIVEN to other COMMUNITIES …….. 94 (2016 – 90) (3.6%)

TOTAL Number of PATIENTS TRANSPORTED to the HOSPITAL …… 824 (2016 – 735) (63.3%)

- Catholic Medical Center (CMC) ……63
- Concord Hospital …….. 644
- Elliot Hospital …… 124

Average REACTION Time (Dispatch to Responding)…… 52.2 Seconds

Average RESPONSE Time (Dispatch to On-Scene) …… 5 Minutes 44 Seconds

Average ON-SCENE Time …… 18 Minutes 25 Seconds

Average TRANSPORT Time …… 19 Minutes 2 Seconds

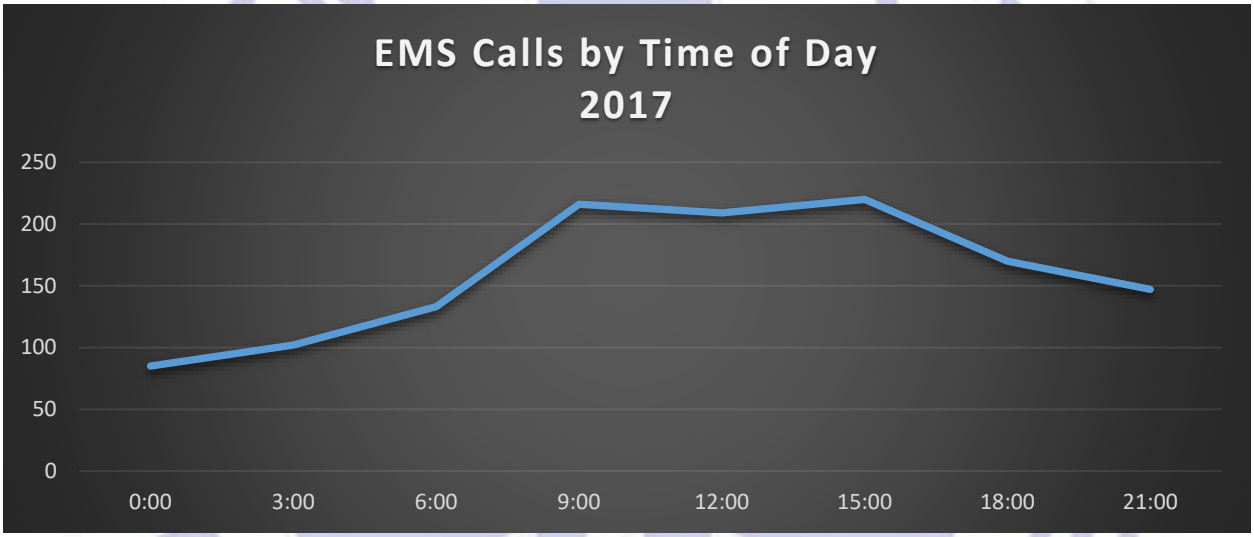
Average AT HOSPITAL Time …… 19 Minutes 35 Seconds

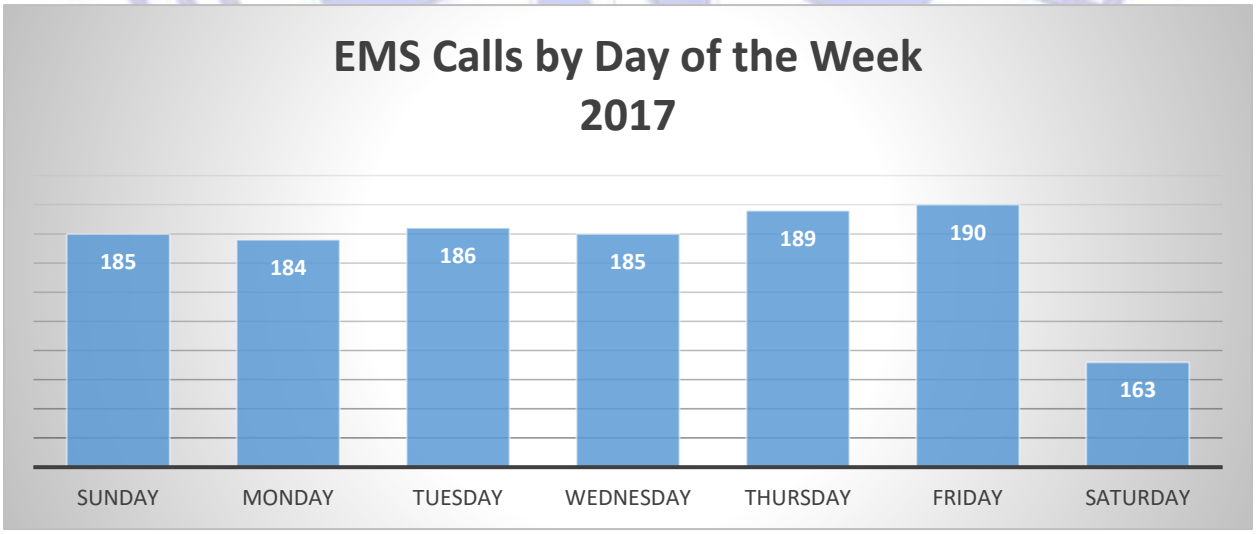
Average CALL LENGTH Time (Dispatch to In-Service) …….. 1 Hour 3 Minutes 38 Seconds

TIME OF CALLS (*Time of Day & Day of the Week*)

TIME	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS
0:00-2:59	18	12	8	9	9	12	17	**85**
3:00-5:59	16	13	16	16	19	12	10	**102**
6:00-8:59	27	13	13	23	28	17	12	**133**
9:00-11:59	26	40	35	36	19	31	29	**216**
12:00-14:59	36	18	36	37	27	34	21	**209**
15:00-17:59	16	32	38	35	35	36	28	**220**
18:00-20:59	25	30	19	18	29	26	23	**170**
21:00-23:59	21	26	21	11	23	22	23	**147**
TOTALS	**185**	**184**	**186**	**185**	**189**	**190**	**163**	**1282**

*Excludes some Mutual Aid Received Runs





EMS INCIDENTS by DISPTCHED REASONS

INCIDENT COMPLAINT REPORTED by DISPATCH (EMD CODE)	OCCURANCE
Falls (17)	137
Breathing Problems (6)	132
Chest Pain (Non-Traumatic)(10)	121
Sick Person (26)	115
MVC / Transportation Incident (29)	102
Medical Alarm (32)	68
Unconscious / Syncope (31)	67
Lift / Invalid Assist	58
Abdominal Pain / Problems (1)	37
Psychiatric / Behavioral / Suicide Attempt (25)	37
Assault (4)	33
Hemorrhage / Laceration / Bleeding (21)	31
Overdose / Misuse of Meds / Poisoning (23)	31
Seizure (12)	30
Back Pain (Non-Traumatic)(5)	27
Unknown Problem / Person Down (32)	27
Stroke / CVA / TIA (28)	23
Diabetic Problem (13)	22
Altered Mental Status (26)	21
Pain (26)	19
Cardiac Arrest / Death (9)	17
No Other Appropriate Choice	13
Allergic Reaction / Stings / Bites (2)	12
Dizziness (26)	11
Traumatic Injury (30)	11
Carbon Monoxide / Hazmat / Inhalation / CBRN (8)	9
Headache (18)	8
Heart Problem / AICD (19)	8
Standby	8
Well Person Check	6
Animal Bite / Attacks (3)	5
Auto vs Pedestrian (29)	4
Choking (11)	4
Walkin (EMS Related)	4
Head Injury (30)	3
Nausea / Vomiting (26)	3
Automated Crash Notification (34)	2
Fracture (30)	2
Pregnancy / Childbirth / Miscarriage (24)	2
Stab / Gunshot / Penetrating Trauma (27)	2
Alcohol Intoxication	1
Burns / Explosion (7)	1
Eye Problem / Injury (16)	1
Fever (26)	1
Hanging (30)	1
Healthcare Professional / Admission (35)	1

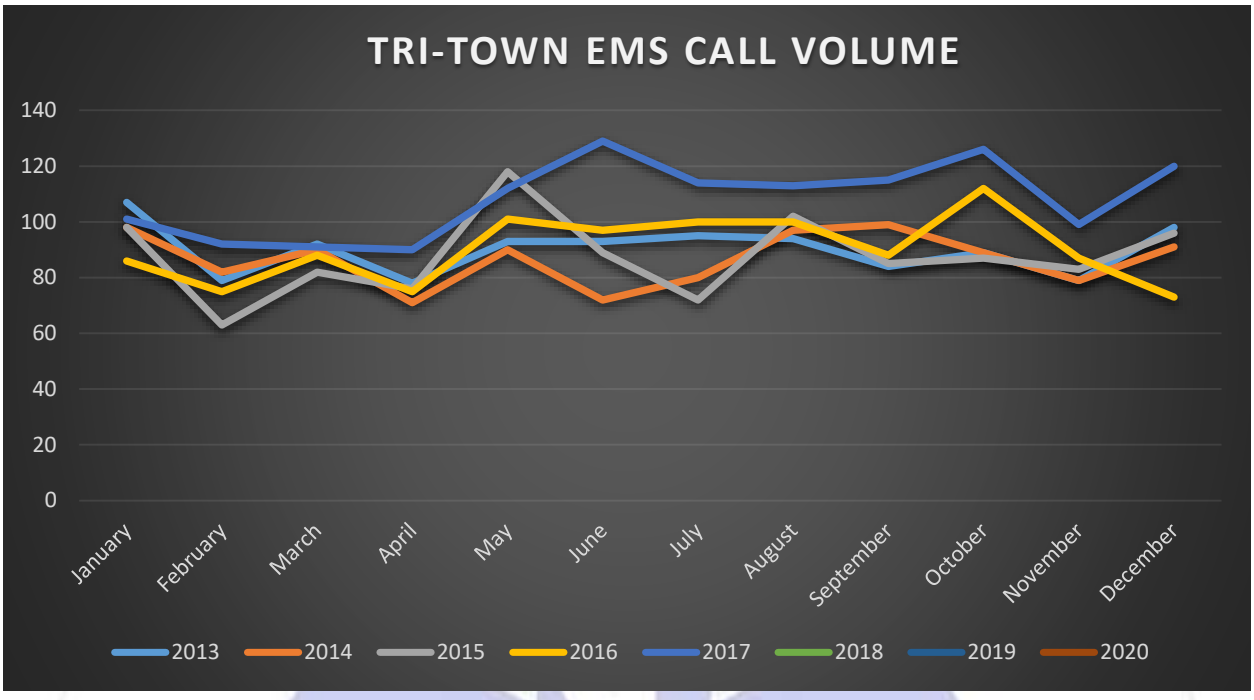
Intercept	1
Medication Reaction (Not Allergic)	1
Search and Rescue	1

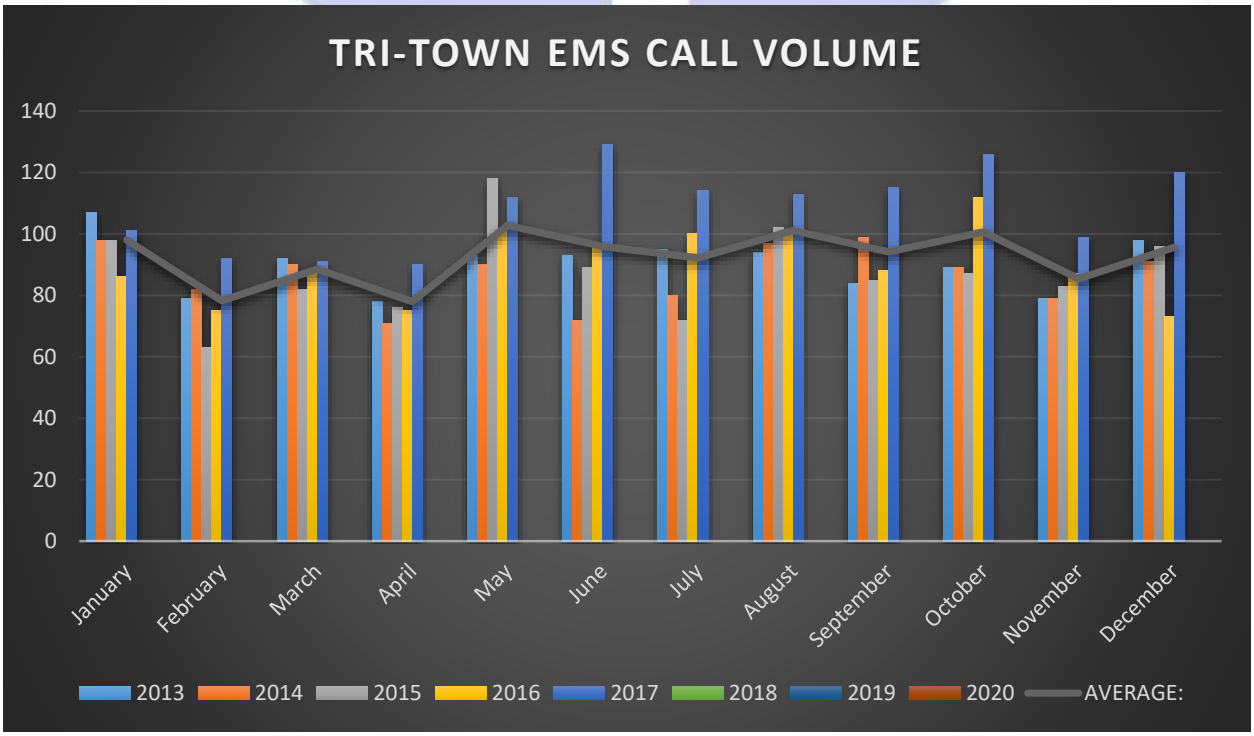
PROCEDURES ADMINISTERED

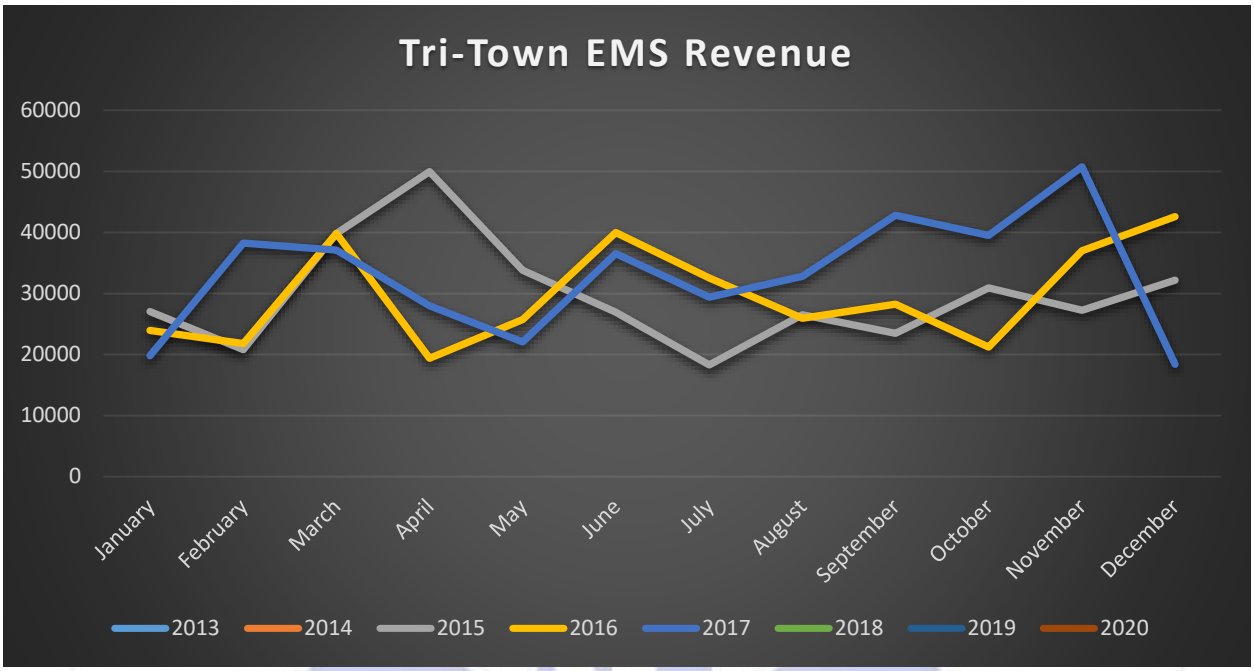
PROCEDURE PERFORMED	OCCURANCE
Vascular: IV / Extremity Vein Catheterization	822
Cardiac: 12-Lead ECG Obtained	547
Assessment: Patient Assessment	536
Cardiac: ECG Monitor (4-Lead or Defib Pads)	361
Assessment: Stroke Exam	46
Respiratory: $etCO_2$ Digital Capnography	30
Ortho: Spinal Motion Restriction Applied (w/ C-Collar)	30
Vascular: IO / Intraosseous Cannulation	14
Respiratory: BVM / Bagged Ventilations (w/ Mask)	11
Respiratory: CPAP	10
Respiratory: ETT / Intubation (Orotracheal)	9
Cardiac: CPR (Mechanical Device)	7
Cardiac: CPR (Manual)	6
Cardiac: 15-Lead ECG Obtained	4
General: Patient Cooling (Cold Pack or General)	4
Movement: C-Collar Applied for Stabilization during Movement	4
Ortho: Spinal Assessment	4
Respiratory: NPA / Nasopharyngeal Airway Insertion	4
Cardiac: Defibrillation (Manual)	3
Respiratory: Suction Airway	3
Vascular: IV / Venous Access via Pre-Existing Access	3
Movement: Movement via Extrication Device	2
Ortho: Spinal Motion Restriction withheld Per Protocol	2
Respiratory: BVT / Bagged Ventilations (via Tube)	2
Respiratory: ETT / Intubation (Orotracheal Using Bougie)	2
Respiratory: OPA / Oropharyngeal Airway Insertion	2
Cardiac: Defibrillation (AED)	1
General: Eye Irrigation	1
General: Patient Warming (Warm Pack or General)	1
Movement: Extrication of Patient	1
Movement: Movement via Extrication Device	1
Ortho: Spinal Motion Restriction Applied (w/o C-Collar)	1
Ortho: Splinting (Traction)	1
Respiratory: King Supraglottic Airway Insertion	1
Soft Tissue: Pressure Dressing Application	1
Vascular: EJ / External Jugular Vein Catheterization	1
Vascular: IV / Venous Catheter Removal	1

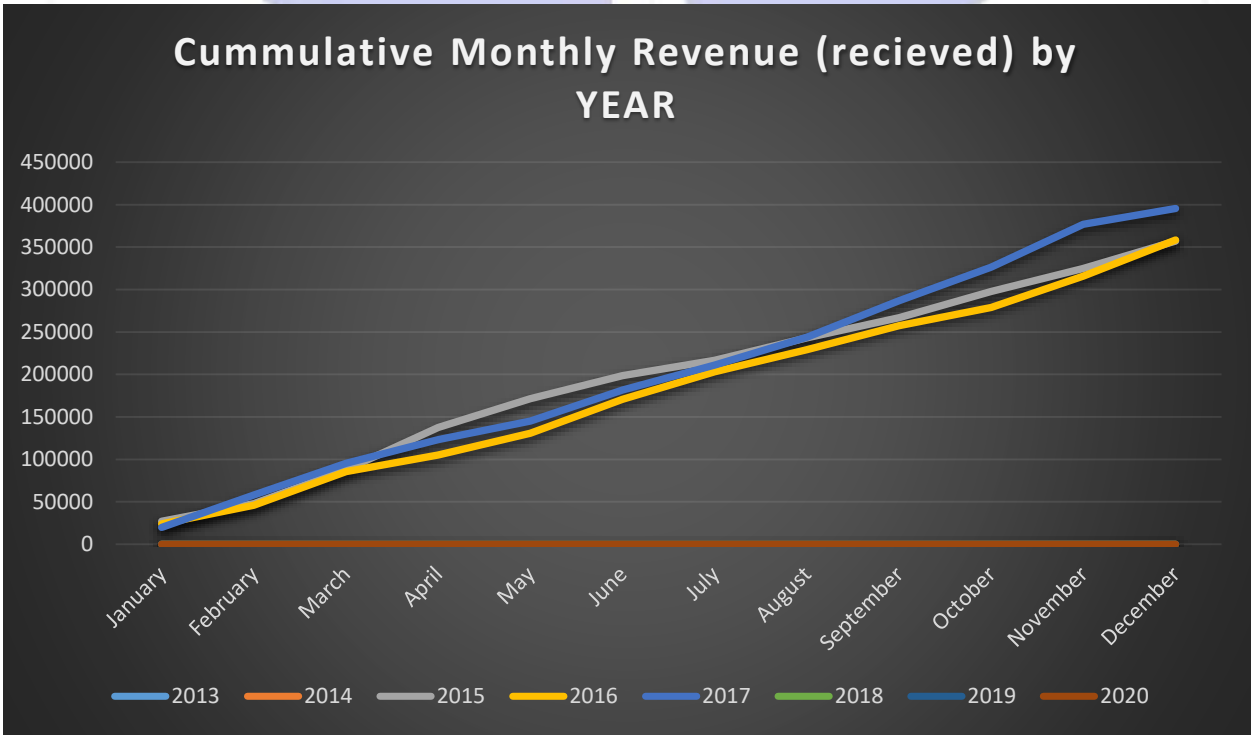
MEDICATIONS ADMINSTERED

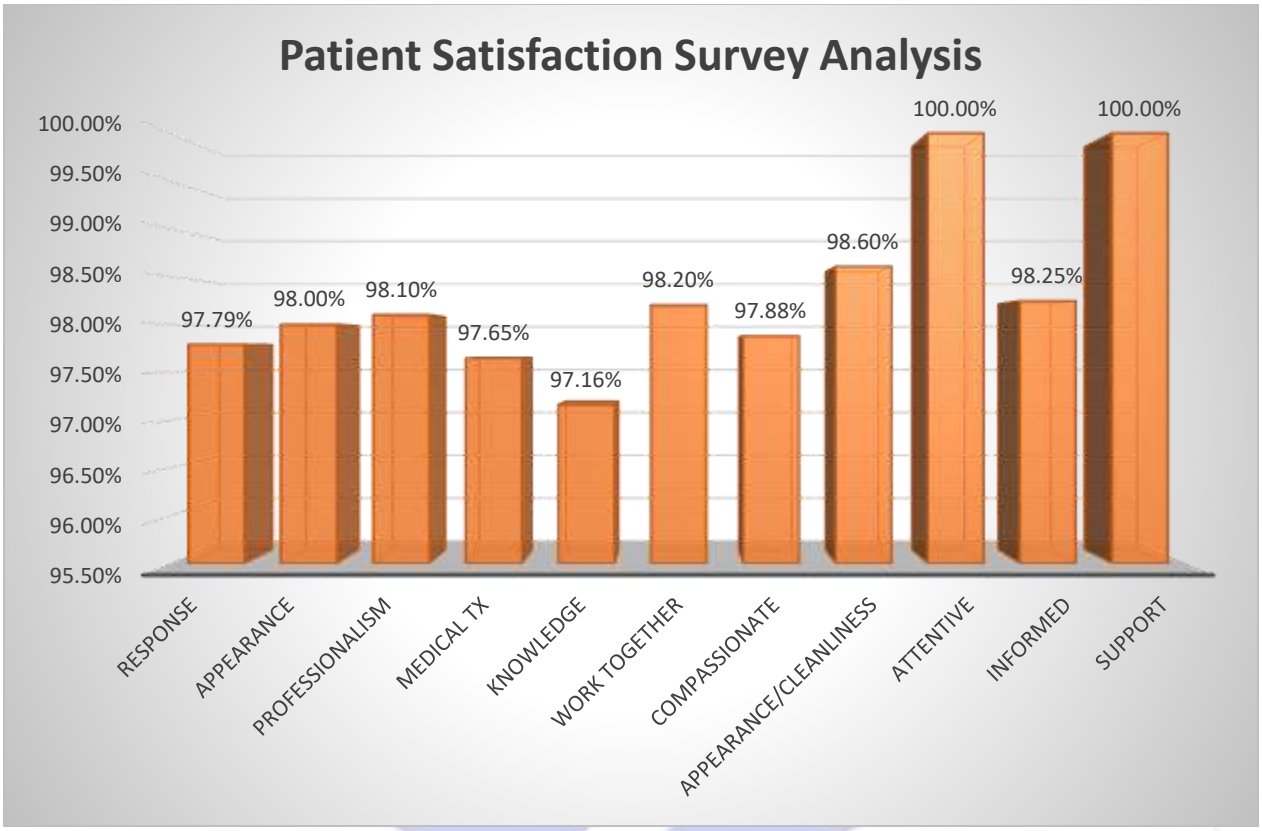
MEDICATION ADMINISTERED	OCCURANCE
Normal Saline	209
Ondansetron / Zofran	142
Fentanyl	134
Oxygen	111
Nitroglycerine	100
Aspirin	73
DuoNeb (Ipratropium Bromide mixed w/ Albuterol)	59
Naloxone / Narcan	52
Epinephrine 1:10,000	36
Methylprednisolone / Solu-Medrol	17
Dextrose 10% (D10)	14
Albuterol	12
Dextrose	12
Midazolam / Versed	11
Ketorolac / Toradol	9
Epinephrine 1:1,000 (Epinephrine 1mg/ml)	7
Diphenhydramine / Benadryl	6
HYDROmorphone / Dilaudid	6
Glucose (Oral)	5
Sodium Bicarbonate	5
Adenosine	4
Diltiazem / Cardizem	4
Dextrose / Glucose (Oral)	3
Glucagon	3
Ipratropium Bromide	3
Prochlorperazine / Compazine	3
Atropine	2
Acetaminophen	1
Activated Charcoal	1
Magnesium Sulfate	1
Metaclopramide / Reglan	1
Metoprolol / Lopressor	1


TRI-TOWN EMS CALL VOLUME
140
120
100
80
60
40
20
0
January
February
March
April
May
June
July
August
September
October
November
December
2013
2014
2015
2016
2017
2018
2019
2020


TRI-TOWN EMS CALL VOLUME
140
120
100
80
60
40
20
0
January
February
March
April
May
June
July
August
September
October
November
December
2013
2014
2015
2016
2017
2018
2019
2020
AVERAGE:


Tri-Town EMS Revenue
60000
50000
40000
30000
20000
10000
0
January
February
March
April
May
June
July
August
September
October
November
December
2013
2014
2015
2016
2017
2018
2019
2020


Cummulative Monthly Revenue (recieved) by YEAR
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
January
February
March
April
May
June
July
August
September
October
November
December
2013
2014
2015
2016
2017
2018
2019
2020


Patient Satisfaction Survey Analysis
100.00%
99.50%
99.00%
98.50%
98.00%
97.50%
97.00%
96.50%
96.00%
95.50%
97.79%
98.00%
98.10%
97.65%
97.16%
98.20%
97.88%
98.60%
100.00%
98.25%
100.00%
RESPONSE
APPEARANCE
PROFESSIONALISM
MEDICAL TX
KNOWLEDGE
WORK TOGETHER
COMPASSIONATE
APPEARANCE/CLEANLINESS
ATTENTIVE
INFORMED
SUPPORT